

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/801,291	GORYAVSKY, JULIUS	
	<b>Examiner</b>	<b>Art Unit</b>	
	Anh-Vu H. Ly	2667	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed March 15, 2004.
2. ☒ The allowed claim(s) is/are 1, 3-11, 18, 20-28 renumbered as 1-20.
3. ☒ The drawings filed on 15 March 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date <u>September 02, 2004</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
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## DETAILED ACTION

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Donald R. Boys on May 24, 2005.

The application has been amended as follows:

#### *In The Claims*

1. (Currently Amended) A method for assigning identifiers in a distributed system, comprising:
  - (a) establishing a circle as a locus of all identifiers, with the value of any point on the circle being the portion of one complete revolution in a first direction around the circle to the point, measured from a first zero point; and
  - (b) selecting values to be assigned as identifiers as needed by rounds of assignment, wherein, in any round of assignment, beginning with n equal-length sectors, termed long sectors, only the value of midpoints of long sectors are selected as new identifiers to be assigned in the system, each new assignment creating two new short sectors, the round continuing until all long sectors are divided, making the number of sectors at the end of the round, and the beginning of the next round  $2n$ , and wherein the beginning and end of any round of assignment has identifiers assigned with point values that divide the circle into equal-length sectors.

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Claim 2 is cancelled.

Claims 3 and 4, in line 1, replace "The method of claim 2" with  
- -The method of claim 1- -.

Claim 6, in line 1, delete "convention"; in line 3, insert - -yet divided- - after "which are not"; and in line 4, replace "the main bitmap" with - -the bitmap- -.

Claims 7 and 9, in line 1, delete "main".

Claim 8, in line 1, replace "the segment" with - -the fragment- -.

Claims 12-17 are cancelled.

18. (Currently Amended) A distributed, serverless system comprising:

a plurality of computerized appliances as active and inactive nodes in the serverless system;

a communication facility interconnecting individual ones of the plurality of computerized appliances; and

an assignment system for assigning and re-assigning identifiers to nodes of the serverless system;

wherein the assignment system establishes a circle as a locus of all identifiers, with the value of any point on the circle being the portion of one complete revolution in a first direction around the circle to the point, measured from a first zero point, and selects values to be assigned as identifiers as needed by successive rounds of assignment, wherein, in any round of assignment, beginning with n equal-length sectors, termed long sectors, only the value of midpoints of long sectors are selected as new identifiers to be assigned in the system, each new assignment creating two new short sectors, the round continuing until all long sectors are

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divided, making the number of sectors at the end of the round, and the beginning of the next round  $2n$ , and wherein the beginning and end of any round of assignment has identifiers assigned with point values that divide the circle into equal-length sectors.

Claim 19 is cancelled.

Claims 20 and 21, in line 1, replace "The distributed system of claim 19" with - -The distributed system of claim 18- -.

Claim 23, in line 1, delete "convention" and in line 4, replace "the main bitmap" with - -the bitmap- -.

Claims 24 and 26, in line 1, delete "main".

Claim 25, in line 1, replace "the segment length" with - -the fragment length- -.

***Allowable Subject Matter***

2. Claims 1, 3-11, 18; 20-28 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art does not teach or fairly suggest selecting values to be assigned as identifiers as needed by rounds of assignment, wherein, in any round of assignment, beginning with  $n$  equal-length sectors, termed long sectors, only the value of midpoints of long sectors are selected as new identifiers to be assigned in the system, each new assignment creating two new short sectors, the round continuing until all long sectors are divided, making the number of sectors at the end of the round, and the beginning of the next round  $2n$ , and wherein the beginning and end of any round of assignment has identifiers assigned with point values that divide the circle into equal-length sectors, as specified in independent claims 1 and 18.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Traversat et al (US Pub 2002/0188657 A1) discloses resource identifiers for a peer-to-peer environment.

White et al (US Pub 2003/0088673 A1) discloses automatic allocation of subnet identifiers in a network.

Li et al (US Pub 2003/0061376 A1) discloses self-routing address assignment in packet-switched networks.

Castro et al (US Pub 2004/0249970 A1) discloses organizational locality in prefix-based structured peer-to-peer overlays.

Harvey et al (US Pub 2004/0054807 A1) discloses system and method for creating improved overlay network with an efficient distributed data structure.


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

avl

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600 5/25/05